

- A single Urology Specialist MDT reviewing the diagnostic data and agreeing the treatment plans of all patients with urological cancers meeting the referral criteria;
- An increased expertise within the Urology Specialist MDT members, the surgeons and their supporting teams, generated by the higher number of patients seen and treated, enabling innovation in the treatment of patients with urological cancers;
- The majority of non-surgical care being provided at a location that is as local as possible to the patient.

See Section 8 for the details of service outcomes to be measured.

## 7 Urology SMDT and surgical activity plan

### 7.1 Current activity levels within the Essex Cancer Network

Please note that these figures **exclude** West Essex CCG populations as their figures are not yet available. They are provided to allow a comparison between current activity and future predicted activity only.

This data has been collated by Essex Cancer Network from their own records.

Data on brachytherapy and radiotherapy has been provided for contextual purposes only.

		2010/11	2011/12	2012/13	2013/14	2014/15
<b>Prostate Cancers</b>						
	<b>Incidence</b>	<b>924</b>	<b>866</b>	<b>930</b>	<b>735</b>	<b>979</b>
	<b>Prostatectomy Numbers</b>	<b>56</b>	<b>82</b>	<b>119</b>	<b>124</b>	<b>106</b>
	<i>Brachytherapy Numbers</i>	<i>61</i>	<i>75</i>	<i>118</i>	<i>112</i>	<i>141</i>
	<i>Radiotherapy Numbers</i>		<i>272</i>	<i>322</i>	<i>377</i>	<i>306</i>
<b>Bladder Cancers</b>						
	<b>Incidence</b>	<b>&gt;227</b>	<b>278</b>	<b>312</b>	<b>153</b>	<b>307</b>
	<b>Cystectomy Numbers</b>	<b>66</b>	<b>78</b>	<b>79</b>	<b>53</b>	<b>57</b>
	<i>Radiotherapy Numbers</i>		<i>31</i>	<i>26</i>	<i>34</i>	<i>26</i>
<b>Renal Cancers</b>						
	<b>Incidence</b>	<b>229</b>	<b>197</b>	<b>189</b>	<b>157</b>	<b>190</b>
	<b>Partial Nephrectomies</b>	<b>23</b>	<b>38</b>	<b>52</b>	<b>35</b>	<b>48</b>
<b>New patients discussed at SMDT</b>		<b>412</b>	<b>472</b>	<b>765</b>	<b>829</b>	<b>981</b>

## 7.2 Expected activity levels within the new urology cancer surgical service

These future activity levels are calculated using a set of assumptions outlined in Appendix C.

The prostatectomy figures include those patients who may choose to have a robotic prostatectomy, if offered.

Please note that these figures **include** West Essex CCG populations as Princess Alexandra Hospital have said they are likely to offer patients the choice of the Essex IOG-compliant centre.

Data on brachytherapy and radiotherapy has been provided for contextual purposes only.

		Notes	2016/17	2017/18	2018/19	2019/20	2020/21
<b>Prostate Cancers</b>							
	Incidence		408	1797	1977	2174	2392
	Prostatectomy Numbers	1	41	180	198	217	239
	<i>Brachytherapy Numbers</i>	<i>1</i>	<i>41</i>	<i>180</i>	<i>198</i>	<i>217</i>	<i>239</i>
	<i>Radiotherapy Numbers</i>	<i>1</i>	<i>41</i>	<i>180</i>	<i>198</i>	<i>217</i>	<i>239</i>
<b>Bladder Cancers</b>							
	Incidence		105	463	509	560	616
	Cystectomy Numbers	1	16	69	76	84	92
	<i>Radiotherapy Numbers</i>	<i>1</i>	<i>5</i>	<i>23</i>	<i>25</i>	<i>28</i>	<i>31</i>
<b>Renal Cancers</b>							
	Incidence		87	381	419	461	507
	Partial Nephrectomies	1, 2	19	91	109	129	152
<b>New patients discussed at SMDT</b>		1	224	987	1086	1194	1314

### Notes

- 2016 numbers reflect one quarter of the fiscal year prediction, based on service launch in Q4 2016/17
- These figures include any complex full nephrectomies that may also be carried out at the surgical centre

## 7.3 Capacity requirements

Current national guidance states that each pelvic surgeon should carry out a minimum of 5 prostatectomies/cystectomies per year. The centre overall should carry out a minimum of 50 such operations per year.

Guidance on behalf of the Department of Health from Frontier Economics 2010 indicates that an optimal Uro-oncology CNS workload is 100 new patients plus 500 in follow-up.

## Appendix C – Activity Level Forecasting

### Assumptions

1. Calculations will be based on incidence figures of urological cancer in Essex provided by Public Health England.
2. An annual rate of increase of incidence of 10% will be used – as endorsed by Ref 1. This is much higher than actual incidence rates over the period of Q4 2008/9 to Q3 2013/14, so should be going some way to cater for age and population growth impacts as well.
3. Incidence numbers will be split prostate (66%), bladder (17%) and renal (14%), based on NCIN Urology Hub figures for 2010-2012 which are in alignment with evidence from Ref 2 (of a 66%/17%/17% split) and endorsed by Ref 1. [The remaining 3% of incidence from the NCIN Urology Hub figures is for testicular cancer incidence.]
4. Numbers of patients estimated to have radical treatment plans agreed will be calculated as 30% of prostate incidence, 20% bladder incidence, and 75% renal patients – based on Ref 2 but with prostate figures amended by input from Essex clinicians on 08/06/15.
5. For prostate cancer radical treatments to be managed by the Specialist MDT with surgery at the specialist surgical centre, the expected split between surgery, brachytherapy and radiotherapy is calculated as one third to each (Ref 1).
6. For bladder cancer radical treatments to be managed by the Specialist MDT with surgery at the specialist surgical centre, the expected split between surgery and radiotherapy is 75:25 based on the opinion of Essex clinicians on 08/06/15. Both of these can be with or without neo-adjuvant chemotherapy. Only those with metastases are likely to have chemotherapy alone.
7. For renal cancer, the proportion of patients expected to have surgical treatment carried out at the specialist surgical centre is approximately 20% of all renal cancer patients (Ref 3), rising to 30% at the end of the next 5 years, as agreed by Essex clinicians on 08/06/15. This number should reflect all partial nephrectomies plus full nephrectomies for patients with an advanced stage of the disease.
8. To estimate activity levels for **new prostate and renal cancer patients** to be discussed at SMDT, the assumption is that this will equate to all prostate and renal cancer patients being considered for specialist radical treatment (surgery/radiotherapy/brachytherapy as appropriate).
9. To estimate activity levels for **new bladder cancer patients** to be discussed at SMDT (muscle-invasive and high-risk superficial non-muscle invasive cancers), Ref 4 refers to 20%-25% of bladder cancer patients having muscle-invasive cancers. This

Choose an item.

## 14 Appendix B – Detailed Activity Levels

These figures were collated from local records by Michael Scanes of Southend Hospital, in collaboration with the other 3 Trusts and Public Health England (whose figures are in Red).

No comparable figures from Princess Alexandra have been made available.

Year	Trust	SMDT New Patients	New diagnosis	Prostate				Bladder				Renal				Brach y	Radiotherapy	
			From all sources	Diagnose d	PHE Nos*.	Surger y	PHE Nos	Diagn osed	PHE Nos*	Surg ery	PHE Nos	Diagn osed	PHE Nos*	Surger y	PHE Nos		Prostate	Bladder
2010 /11	SUHFT			252	157	24	20	63	164	41	19	56	43	38	28			
	BTUH			118	150			84	165			23	58		26			
	MEHT			314	129				140			83	63					
	CHUFT			240	141	32	30	80	170	25	10	67	45	48	30			
	<b>TOTAL</b>	<b>412</b>	<b>1425</b>	<b>924</b>	<b>577</b>	<b>56</b>	<b>50</b>		<b>639</b>	<b>66</b>	<b>29</b>	<b>229</b>	<b>209</b>	<b>86</b>	<b>84</b>	<b>61</b>		
2011 /12	SUHFT			259	140	37	38	67	141	44	15	66	52	57	37		148	14
	BTUH			175	139			56	136			41	40		20			
	MEHT			151	157			90	142			36	53		29			
	CHUFT			281	255	45	40	65	159	34	13	54	45	55	29		124	17
	<b>TOTAL</b>	<b>472</b>	<b>1341/ 1459</b>	<b>866</b>	<b>691</b>	<b>82</b>	<b>78</b>	<b>278</b>	<b>578</b>	<b>78</b>	<b>28</b>	<b>197</b>	<b>190</b>	<b>112</b>	<b>115</b>	<b>75</b>	<b>272</b>	<b>31</b>
2012 /13	SUHFT			230	167	58	38	60	136	36	20	47	47	53	32		141	8

Choose an item.

	BTUH			179	141			58	121			45	40		21			
	MEHT			227	165			67	125			32	55		23			
	CHUFT			294	232	61	48	127	168	43	13	65	45	72	44		181	18
	<b>TOTAL</b>	<b>765</b>	<b>1431/ 1442</b>	<b>930</b>	<b>705</b>	<b>119</b>	<b>86</b>	<b>312</b>	<b>550</b>	<b>79</b>	<b>33</b>	<b>189</b>	<b>187</b>	<b>125</b>	<b>120</b>	<b>118</b>	<b>322</b>	<b>26</b>
2013 /14	SUHFT			254	225	34	36	61	128	25	12	67	43	46	31		122	8
	BTUH			66	136			24	128			9	49		17			
	MEHT			154	179			70	143			19	64		33			
	CHUFT			261	197	90	73	33	142	28	10	62	60	60	42		255	26
	<b>TOTAL</b>	<b>829</b>	<b>1045/ 1494</b>	<b>735</b>	<b>737</b>	<b>124</b>	<b>10 9</b>	<b>153</b>	<b>541</b>	<b>53</b>	<b>22</b>	<b>157</b>	<b>216</b>	<b>106</b>	<b>123</b>	<b>112</b>	<b>377</b>	<b>34</b>
2014 /15	SUHFT			397	202	9	14	67	117	23	12	94	67	77	51		154	10
	BTUH			92	152			19	132			6	50		20			
	MEHT			176	197			69	113			19	46		20			
	CHUFT			314	303	97	87	152	156	34	8	71	73	74	54		160	16
	<b>TOTAL</b>	<b>981</b>	<b>1476/ 1608</b>	<b>979</b>	<b>854</b>	<b>106</b>	<b>10 1</b>	<b>307</b>	<b>518</b>	<b>57</b>	<b>20</b>	<b>190</b>	<b>236</b>	<b>151</b>	<b>154</b>	<b>141</b>	<b>306</b>	<b>26</b>